

REMARKS

Claims 1-3, 5, 8, 30 and new claims 34-37 are pending in this application. The applicants also request the addition of claim 33 in the application.

The applicants traverse the withdrawal of claim 33 because claim 33 and claim 8 are the same but for the scope of the preamble. The preamble of claim 8 concerns a disk unit and wiring information to a disk, while the preamble of claim 33 concerns a unit which writes information to a recording medium. The three elements of each claim are exactly the same with the only difference being the indirect reference to the disk and the recording medium in the body of claim 8 and 33 respectively.

Since the object being worked on, namely the disk or recording medium, is not apart of the claim and the only other difference lies in the scope of the preamble, it is urged that claims 8 and 33 should be prosecuted together. Claim 33 could be considered generic to Claim 8. Therefore the applicants urge the Examiner to reconsider the withdrawal of claim 33 and enclose amended claim 33 for the Examiner's review assuming that claim 33 will be reconsidered in this application.

The amendments to the claims are supported in the specification as follows: Claims 1, 8 and 33 (p.14, lines 8-15; FIGS. 1, 2A and 7A); Claim 34 (FIGS. 2-3) ; Claim 35 (FIGS. 2-3); Claim 36 (based on claim 1; p.37, lines 18-27) and Claim 37 (based on claim 8; p.37, lines 18-27).

Claims 1 and 30 stand rejected under 35 U.S.C. 102 (e) as being anticipated by **Ohwe '944**.

In view of this rejection, claim 1 is amended to further clarify the subject matter of the claimed invention. **Ohwe '944** proposes a head assembly having a head slider and an integrated

circuit chip. However, the head slider 90 and the integrated circuit chip 100E are mounted on opposite surfaces of the gimbal as shown in Fig. 16. This is because the height of the integrated circuit chip, when coated with a resin layer, would become higher than the head slider 90 if the head slider 90 and the integrated circuit chip 100E were mounted on the same surface of the gimbal, thereby making the head assembly inoperative (that is, the integrated circuit chip would contact the recording medium before the head slider).

If the resin layer were to be provided on the integrated circuit chip in **Ohwe '944** and this integrated circuit chip were to be mounted on the same surface of the gimbal as the head slider, the height of the integrated circuit chip would exceed the height of the head slider.

In **Ohwe '944**, for the head assemblies having the head slider and the integrated circuit chip provided on the same mounting surface, the resin layer is not provided on the integrated circuit chip, as is evident from **Ohwe '944**. This is because the resin layer is too thick.

On the other hand, the claimed invention provides the head slider and the integrated circuit chip on the same mounting surface, and at the same time, the integrated circuit chip has an upper surface portion covered by a layer so that a height of the integrated circuit chip, including the layer, is lower than a height of the head slider from the mounting surface (p.16, lines 7-25).

Ohwe '944 does not teach or suggest such a height relationship of the head slider and the integrated circuit chip on the same mounting surface, and does not teach or suggest the above described structure according to the invention as now claimed.

Accordingly, it is believed that claims 1 and 30 are allowable over **Ohwe '944**.

Claims 1-3, 5 and 8 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over **Shiraishi '062** in view of **Shiraishi '746**.

In view of this rejection, claims 1 and 8 are amended to further clarify the subject matter of the claimed invention. As argued previously, **Shiraishi '062** fails to teach or suggest covering the integrated circuit chip by a layer to prevent generation of foreign particles, in order to solve the problems of the prior art described on page 2, line 11 to page 3, line 9 of the specification. Further, as noted by the Examiner, **Shiraishi '062** is silent as to the integrated circuit chip height, including the layer, being lower than a height of the head slider from the mounting surface.

Shiraishi '746 is relied upon as teaching the height of the integrated circuit chip being lower than the height of the head slider from the mounting surface. However, as argued previously, the object of **Shiraishi '062** is to improve the mechanical impact resistance of the head IC chip (integrated circuit chip). In order to achieve this object, it is essential in **Shiraishi '062** to provide a thick shock absorption layer **25**. Otherwise, the mechanical impact resistance of the head IC chip **13** cannot be achieved. In addition, it would be essential in **Shiraishi '062** to provide a projecting layer portion of the shock absorption layer **25** at the top peripheral edges of the head IC chip **13** in order to improve the mechanical impact resistance of the head IC chip **13**, as may be seen from Fig. 3, thereby making it impossible to make the height of the head IC chip **13**, including the shock absorption layer **25**, lower than the height of the head slider.

In other words, even if the teachings of **Shiraishi '062** and **Shiraishi '746** were combined, this combination would only lead to a result similar to that described above with reference to **Ohwe**

'944. More particularly, the height of the head IC chip 13 including the shock absorption layer 25 of Shiraishi '062 would become higher than that of the head slider 12, because the thickness of the shock absorption layer 25 simply cannot be reduced. The only way to prevent the head IC chip 13 from contacting the recording medium is to provide the head IC chip 13 and the head slider 12 on opposite surfaces of the gimbal, as in the case of Ohwe '944.

With respect to the chip covering layer, those skilled in the art would most certainly not consider or use poly(p-xylylene) in Shiraishi '046, because such a material cannot function as a shock absorption layer 25 and cannot achieve the object of Shiraishi '046 which is to improve the mechanical impact resistance of the head IC chip 13 .

Therefore, it is believed that claims 1-3, 5 and 8 are allowable over the combination of Shiraishi '062 and Shiraishi '746.

New claims 34-37 recite that the present invention IC circuit is *raised above* the mounting surface, and therefore Ohwe '944 can be distinguished. Ohwe '944 is easily distinguished because "the bare head IC chip mounting portion 65 is formed so as to form a depressed shape in the suspension 30" (col. 15, lines 24-26). All of the FIGS of Ohwe '944 show this structure which is a different type of head assembly.

Further a thin layer of poly(p-xylylene) specifically located on the corners of the IC chip and the Au bumps results in the improvements in the invention. FIG. 4 of Shiraishi '746 (and col. 9; lines 1-10) does actually disclose that the IC chip 20 is lower in height than the slider

19. This would help prevent disk damage.

Shiraishi '746, however, deals with improvements in temperature conductivity because poly(p-xylyene) is a poor thermal conductor as explained on p.37, lines 15-17 of the specification.

None of the references disclose a structure having poly(p-xylyene) on the IC chip and the mounting bumps of a raised IC chip. Therefore as currently claimed in new claims 36-37, the combination of the references could not suggest the invention.

In brief, the combination of **Shiraishi '062** with **Shiraishi '746** is does not create a logical conclusion of obviousness.

Amendment
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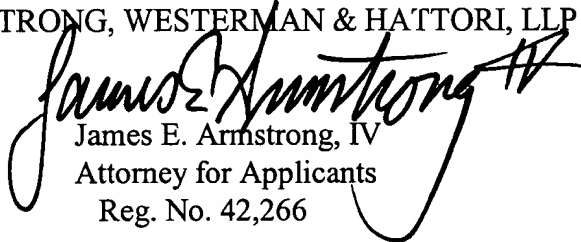
U.S. Patent Application Serial No. 09/548,313
Attorney Docket No. 000452

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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